

## REMARKS

By this amendment, claims 10, 14 and 15 have been cancelled without prejudice or disclaimer, claims 1, 12 and 13 amended to more particularly define the invention and clearly distinguish over the prior art of records, and new claim 21 added.

Applicant respectfully submits that the above amendments do not add new matter to the application and are fully supported by the specification. In view of the above Amendments and the following Remarks, Applicant respectfully requests reconsideration and withdrawal of the objections and rejections for the reasons discussed below.

### Rejection of Claims under 35 U.S.C. §103

Claims 1 - 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U. S. Patent No. 6,414,741 issued to Hasegawa, et al. ("Hasegawa") in view of U. S. Publication No. 2004/0046909 issued to Sekiguchi ("Sekiguchi"). Applicant respectfully traverses this rejection for at least the following reasons.

With regard to claim 1 and 12, the Examiner states that Hasegawa teaches all of the limitations of claim 1 and 12 respectively, except that the system does not include a color filter array panel or a printed circuit board. The Examiner also states that Sekiguchi teaches a liquid crystal display panel comprising a color filter array panel and the use of a printed circuit board (PCB) bonding unit for bonding a PCB to the printed circuit film. The Examiner argues that it would be *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to bond a printed circuit film to a PCB

as taught by Sekiguchi with the system of manufacturing the liquid crystal display taught by Hasegawa. However, the Examiner fails to make a *prima facie* case of obviousness because the examiner has failed to provide motivation to combine the teachings of Sekiguchi with those of Hasegawa.

To establish a *prima facie* case of obviousness there must be some suggestion or motivation to modify the reference or to combine reference teachings. The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. See *MPEP 2142*.

The Examiner argues that one of ordinary skill in the art would be motivated to bond a printed circuit film to a PCB as taught by Sekiguchi with the system of manufacturing the liquid crystal display taught by Hasegawa. This combination would necessarily require replacing the wire board taught by Hasegawa with the PCB taught by Sekiguchi because a wire board and a PCB cannot both be bonded to a printed circuit film at the same time. The Examiner argues that the motivation to replace the wire board with a PCB in the system of Hasegawa is that the use of the PCB enables the application of signals to the driving ICs of the display panel. However, Hasegawa teaches the use of a wiring board (column 8, lines 38-40) instead of a PCB, which also enables the application of signals to the driving ICs of the display panel. Thus, the Examiner merely states the function of both a wire board and a PCB, but does not give motivation as to why one would be substituted for the other. Therefore, the Examiner has failed to provide any suggestion or motivation to modify the Hasegawa reference or to combine the reference teachings of Hasegawa with Sekiguchi.

With regard to Claim 1, Claim 10 as originally presented has been incorporated into Claim 1 as currently amended. With regard to the original claim 10, the Examiner states that Hasegawa teaches that the bonding inspection unit comprises two sub-units for inspection. The Examiner argues that the two sub-units are the dummy lead wires, which are incorporated into the printed circuit film bonding unit and the aligning marks, which are incorporated into the wire board bonding unit. However, the Applicant respectfully submits that Hasegawa does not teach that the bonding inspection unit for inspecting the bonding of the printed circuit film on the panel assembly comprises two sub-units for inspection before and after the bonding of the PCB, respectively.

The dummy lead wires and the aligning marks taught by Hasegawa cannot be considered sub-units of the inspection unit as argued by the Examiner, because they are raw materials that are incorporated into the finished product and thus cannot be considered part of a system for manufacturing a liquid crystal display.

Further, in formulating this rejection, the Examiner has argued that it would be *prima facie* obvious to bond the printed circuit film to a printed board as taught by Sekiguchi in the system taught by Hasegawa. This would necessarily require the exclusion of the wire board taught by Hasegawa because a PCB and a wire board cannot both be attached to the printed circuit film. Therefore, the aligning marks that the Examiner relies on for this rejection would not be present in the combined invention as the Examiner has described it.

Further, even if the aligning marks were present in the combined invention as the Examiner has described it, the aligning marks taught by Hasegawa are used to align the

TCP to the wiring board before the soldering/bonding of the wiring board to the TCP (column 8, lines 55-61), and have no purpose whatsoever after the soldering/bonding.

Further, even if the aligning marks were present in the combined invention as the Examiner has described it, the aligning marks are used to align the TCP to the wiring board and are not used to inspect the bonding of the printed circuit film on the panel assembly as is required by Claim 1. Hasegawa does not teach inspecting the bonding of the printed circuit film on the panel assembly after bonding of the TCP to the wiring board.

With regard to Claim 12, Claim 15 as originally presented has been incorporated into Claim 12 as currently amended. With regard to the original claim 15, the Examiner argues that Hasegawa teaches that the inspection is performed both before and after bonding of the wire board and cites both Column 6, lines 56-67 and Column 8, lines 45-54 as examples. However, the Applicant respectfully submits that Hasegawa does not teach inspecting the bonding of the printed circuit film on the panel assembly after the bonding of the PCB.

The examiner cites Column 8, lines 45-54 presumably as an example of Hasegawa's teaching of inspecting the bonding after the bonding of the wire board. However, at Column 8, lines 45-54, Hasegawa only teaches aligning a TCP and a wire board (column 8, lines 45-54) prior to bonding/soldering.

In formulating this rejection, the Examiner has stated that it would be *prima facie* obvious to bond the printed circuit film to a printed board as taught by Sekiguchi in the system taught by Hasegawa. This would necessarily require the exclusion of the wire board taught by Hasegawa because a PCB and a wire board cannot both be attached

to the printed circuit film. Therefore, the aligning marks that the Examiner relies on for this rejection would not be present in the combined invention as the Examiner has described it.

Further, even if the aligning marks were present in the combined invention as the Examiner has described it, the aligning marks taught by Hasegawa are used to align the TCP to the wiring board before the soldering/bonding of the wiring board to the TCP (column 8, lines 55-61), and have no purpose whatsoever after the soldering/bonding.

Further, even if the aligning marks were present in the combined invention as the Examiner has described it, the aligning marks are used to align the TCP to the wiring board and are not used to inspect the bonding of the printed circuit film on the panel assembly as is required by Claim 12.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. §103(a) rejection of claims 1 - 20. Since none of the other prior art of record, whether taken alone or in combination, discloses or suggests the claimed subject matter, it is respectfully submitted that claims 1 and 12, as well as claims 2-9, 11, 13 and 16-20 that depend therefrom, are allowable, and prompt notification thereof is respectfully solicited.

#### **New Claims**

Claim 21 is newly added. An adequate description and support for the new claims are provided in the specification, for example, paragraphs 0054-0055.

## Conclusion

Applicant believes that a full and complete response has been made to the Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully Submitted,



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